

TOYA107.007APC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: TADA et al.

Art Unit: 1612

Application No.: 10/537,320

Examiner:

SZNAIDMAN, MARCOS L

Filing Date: June 2, 2005

Attorney DOCKET No.:

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For: DENDRITE ELOGATION INHIBITOR FOR  
MELANOCYTE AND SKIN PREPARATION FOR  
EXTERNAL USE CONTAINING THE SAMEDECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I declare as follows:

1. I am employee of Pola Chemical Industries Inc. located at 6-48, Yayoi-cho, Suruga-ku, Shizuoka-shi, Shizuoka, Japan, which is engaged in the business of production and sale of cosmetics.

2. I am one of co-inventors of the above-identified patent application.

3. Ishida et al. (EP 1147764) describes that a compound represented by the general formula I is used for the treatment of skin problems like skin darkening, wrinkles, etc. However, the compound described in Ishida et al. does not inhibit elongation of melanocytic dendrite as opposed to Centaureidin of the amended Claim 7 in the present application.

4. I have conducted the experiments described herein and present them as evidence supporting the above fact.

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## 5. Purpose of the experiments

Comparing an inhibitory action on the elongation of melanocytic dendrites between Centaureidin and a compound represented by the formula III (Nobiletin) disclosed in Ishida et al.

## 6. Method of the experiments

Inhibitory actions on the elongation of melanocytic dendrites were examined for Centaureidin and Nobiletin according to the method described in Example 1 of the present description. Note that a control was a solution having only a basal medium.

The concentration of the compound in each Sample was as follows.

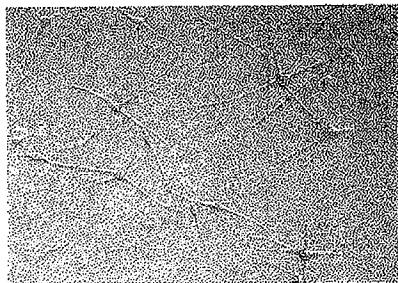
Sample 1 Centaureidin  $10^{-5}\%$   
Sample 2 Nobiletin  $10^{-4}\%$   
Sample 3 Nobiletin  $10^{-5}\%$   
Sample 4 Nobiletin  $10^{-6}\%$

## 7. Results

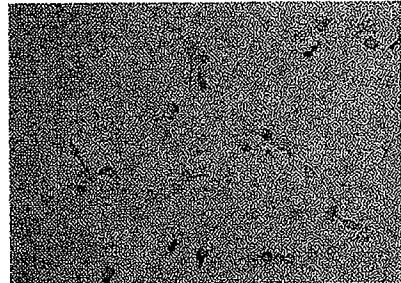
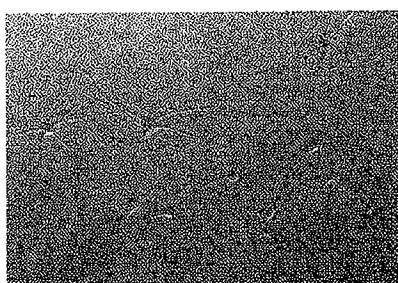
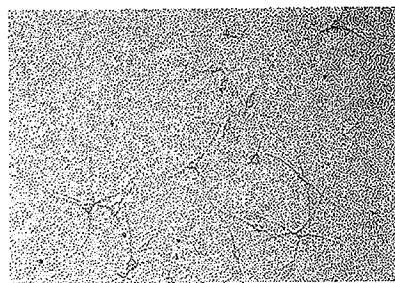
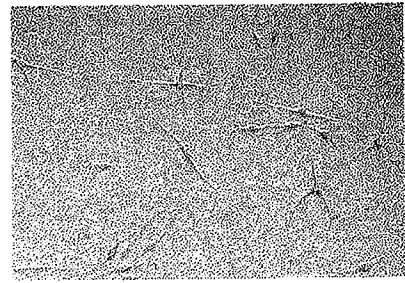
The results are shown in the following table and photographs. The table shows length of the dendrite.

	Added compound	Length of dendrite ( $\mu\text{m}$ )
Sample 1	Centaureidin $10^{-5}\%$	$30\pm10$
Sample 2	Nobiletin $10^{-4}\%$	$139\pm23$
Sample 3	Nobiletin $10^{-5}\%$	$142\pm18$
Sample 4	Nobiletin $10^{-6}\%$	$141\pm30$
Control	-	$143\pm35$

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Control

Sample 1  
(Centaureidin  $10^{-5}\%$ )Sample 2  
(Nobiletin  $10^{-4}\%$ )Sample 3  
(Nobiletin  $10^{-5}\%$ )Sample 4  
(Nobiletin  $10^{-6}\%$ )

It is clear that the dendrites were elongated in the added groups of Nobiletin as well as the control, while the dendrites were not elongated in the added group of Centaureidin.

8. I further declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

By: Akihiro Tada  
Akihiro TADA

Date: April 13, 2009